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Book Reviews

C. S. HORNIG, *Volterra–Stieltjes Integral Equations*, North–Holland, 1975, 157 pp. The present resurgence of interest in Volterra integral equations is baffling, despite insistent rejoinders by the few specialists, who allude to "applications" with the same awed breathlessness as a bureaucrat would refer to "the office upstairs" in a Kafka novel. At any rate, the results are presented in a clear, accessible style, and that alone is enough.

A. DOLE AND B. ECKMANN (Eds.), *Model Theory and Topoi*, Springer, 1975, 354 pp. Topoi can no longer be dismissed as just another gadget invented by a few infatuated categorists. They are beginning to look so central that we may soon all have to take a summer off and learn them. They have done more for category theory than anything else since the adoption of the adjective "exact."

A. J. CHORIN, *Lectures on Turbulence Theory*, Publish or Perish, 1975, 159 pp. Ignorant as this reviewer is on this subject, he nevertheless feels after perusing this book that a clear, concise and unoversimplified picture comes through. Congratulations to the author for tackling such a refractory subject.

M. REED AND B. SIMON, *Fourier-Analysis, Selfadjointness*, Academic Press, 1975, 361 pp. Easily the best textbook in functional analysis since Dunford-Schwartz. The enormous advance in functional analysis is confirmed by the almost null overlap of the two texts. We ask the authors only one thing: more.

G. D. MOSTOW (Ed.), *Mathematical Models for Cell Rearrangement*, Yale University Press, 1975, 271 pp. I am afraid these are more models than mathematical. The lack of real contact between mathematics and biology is either a tragedy, a scandal, or a challenge, it is hard to decide which. It is gratifying to see a new publishing aggressiveness in the formerly staid Yale University Press.

L. KLEINROCK, *Queuing Systems*, Wiley, 1975, 416 pp. We tend to become wary of any field in which too many texts are published, and queuing is a prime suspect. In its defense, one can retort that it is one of the branches of probability that really work, a phenomenon that is becoming chillingly rare.

E. NELSON, *Tensor Analysis*, Princeton University Press, 1967, 127 pp. A useful compendium, but far too short. Why are there so few textbooks in this subject? Perhaps prospective authors are turned off by the gaffes of past writers, by the notational frivolities of Schouten, by the megalomania of the relativists.

A. H. LIGHTSTONE AND A. ROBINSON, *Non-Archimedean Fields and Asymptotic Expansions*, North–Holland, 1975, 204 pp. Anyone with a week's knowledge of nonstandard analysis will get the idea of applying non-archimedean ordered fields to asymptotic series. This is one such attempt; we shall not hazard a judgment on whether it is a successful one. Asymptotics is one of the last great ideas of the nineteenth century that remain to be